



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|-------------|-----------------------|---------------------|------------------|
| 10/081,848 | 02/20/2002 | Scott William Knutson | KNUT-003 | 4337 |
| 21877 | 7590 | 03/31/2004 | EXAMINER | |
| CURTIS V HARR | | | NGUYEN, TAI T | |
| P O BOX 2842 | | | ART UNIT | |
| FARGO, ND 581082842 | | | PAPER NUMBER | |

2632

DATE MAILED: 03/31/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,848

Applicant(s)

WILLIAM KNUTSON, SCOTT

Examiner

Tai T. Nguyen

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 7-8, 13-14, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haglund (US 3,866,169) in view of Lentine et al. (US 6,603,402).

Regarding claim 1, Haglund discloses a similar device (figures 1-3) used to aid in the loading and unloading of vehicles (10, 12) comprising:

a transmitter unit (18) having a forward, a backward, a left and a right directional button (32, figure 3; col. 2, lines 18-20); and

a receiver unit (14, figure 1) having a forward, a backward, a left and a right direction indicator (26) and a receiver power supply (figure 1) such that when a directional button (32) on the transmitter is activated the corresponding receiver directional indicator is activated (col. 2, lines 21-30).

Haglund discloses the instant claimed invention except for: the transmitter and receiver being wireless, and a transmitter power supply. Lentine et al. teach a water skier alert system (figure 6) comprising a wireless transmitter (44, figure 6) for transmitting a wireless signal to a wireless receiver (24, figure 6) in response to an activation of a directional button (42), wherein the transmitter having its own power

supply (36, figure 6), wherein the receiver having a visual display (22) for indicating speed up, slow down and turn around conditions in response to a signal transmitted from the transmitter (col. 4, line 6 through col. 6, line 24). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the wireless transmitter and receiver as taught by Lentine et al. in the system as disclosed by Haglund for the purpose of providing a portability of transmitting a wireless signal from the transmitter to a remoter receiver in order to facilitate the directional indication to a remote operator.

Regarding claim 2, as shown in figures 4-5, Haglund discloses the directional indicators being lights (col. 2. lines 5-23).

Regarding claim 7, Haglund discloses a similar device (figures 1-3) used to aid in the loading and unloading of vehicles (10, 12) comprising:

a transmitter unit (18) having a forward, a backward, a left and a right directional button (32, figure 3; col. 2, lines 18-20); and

a receiver unit (14, figure 1) having a forward, a backward, a left and a right direction indicator (26) and a receiver power supply (figure 1) such that when a directional button (32) on the transmitter is activated the corresponding receiver directional indicator is activated (col. 2, lines 21-30).

Haglund discloses the instant claimed invention except for: the transmitter and receiver being wireless, a transmitter power supply, and the receiver having an audible indicator that is sounded when a directional button on the transmitter is activated.

Lentine et al. teach a water skier alert system (figure 6) comprising a wireless

transmitter (44, figure 6) for transmitting a wireless signal to a wireless receiver (24, figure 6) in response to an activation of a directional button (42), wherein the transmitter having its own power supply (36, figure 6), wherein the receiver having a visual display (22) for indicating speed up, slow down and turn around conditions and an audible indicator (54) for sounding an audible signal in response to a signal transmitted from the transmitter (col. 4, line 6 through col. 6, line 24). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the wireless transmitter and receiver as taught by Lentine et al. in the system as disclosed by Haglund for the purpose of providing a portability of transmitting a wireless signal from the wireless transmitter to a remoter receiver to facilitate the directional indication to a remote operator and visually/audibly indication the desired conditions to enable the operator taken action in response thereto.

Regarding claim 8, as shown in figures 4-5, Haglund discloses the directional indicators being lights (col. 2. lines 5-23).

Regarding claim 13, Haglund discloses a similar device (figures 1-3) used to aid in the loading and unloading of vehicles (10, 12) comprising:

a transmitter unit (18) having a forward, a backward, a left and a right directional button (32, figure 3; col. 2, lines 18-20); and

a receiver unit (14, figure 1) having a forward, a backward, a left and a right direction indicator (26) and a receiver power supply (figure 1) such that when a directional button (32) on the transmitter is activated the corresponding receiver directional indicator is activated (col. 2, lines 21-30).

Haglund discloses the instant claimed invention except for: the transmitter and receiver being wireless, the transmitter having a power supply and an audible indicator, and the receiver having an audible indicator that is sounded when the audible indicator button on the transmitter is activated. Lentine et al. teach a water skier alert system (figure 6) comprising a wireless transmitter (44, figure 6) for transmitting a wireless signal to a wireless receiver (24, figure 6) in response to an activation of a directional button (42), wherein the transmitter having its own power supply (36, figure 6), wherein the receiver having a visual indicator (22) for indicating speed up, slow down and turn around conditions and an audible indicator (54) for sounding an audible signal in response to a signal transmitted from the transmitter (col. 4, line 6 through col. 6, line 16). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the wireless transmitter and receiver as taught by Lentine et al. in the system as disclosed by Haglund for the purpose of providing a portability of transmitting a wireless signal from the wireless transmitter to a remoter receiver to facilitate the directional indication to a remote operator and visually/audibly indication the desired conditions to enable the operator taken action in response thereto.

In Lentine et al., audible indicator (54) is activated in response to an activation of the directional button (42) to get attention of a boat driver, wherein the audible indicator is separate function from the visual indicator (22) for directional guidance, even though the audible and visual indicators are both initiated by the same manually related button (42, col. 6, lines 12-16). It would have been obvious to a person having ordinary skill in

the art at the time the invention was made to use a separate button for actuation of a separate audible indicator function in the system as taught by Lentine et al. for the purpose of providing the user with the choice of selecting actuating the audible indicator for situation when such audible indicator alert is appropriate, e.g. when the boat driver is not expecting the directional guidance, and choosing not to activate it when the driver is already expecting the directional guidance, in order to prevent unnecessary noise nuisance.

Regarding claim 14, as shown in figures 4-5, Haglund discloses the directional indicators being lights (col. 2. lines 5-23).

Regarding claim 19, Haglund discloses a method for telling a driver of a first vehicle (10) how to position the first vehicle by a driver of a second vehicle (12) when the second vehicle (12) is about to being towed by the first vehicle comprising the step of:

supplying the first vehicle with a receiver (14) having a forward, a backward, a left and a right directional indicator (26, figures 1 and 4);

connecting the receiver (14) to a power supply (col. 2, lines 24-31);

supplying the second vehicle driver with a transmitter (18) having a forward, a backward, a left and a right directional indicator button (32, figures 2-3); and

activating the appropriate button on the transmitter thereby activating the corresponding indicator of the receiver (col. 2, lines 21-30).

Haglund discloses the instant claimed invention except for: the transmitter and the receiver being wireless and the wireless transmitter being connected to a power

supply. Lentine et al. teach a water skier alert system (figure 6) comprising the step of providing a wireless transmitter (44, figure 6) for transmitting a wireless signal to a wireless receiver (24, figure 6) in response to an activation of a directional button (42), wherein the transmitter having its own power supply (36, figure 6), wherein the receiver having a visual display (22) for indicating speed up, slow down and turn around conditions in response to a signal transmitted from the transmitter (col. 4, line 6 through col. 6, line 24). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the wireless transmitter and receiver as taught by Lentine et al. in the system as disclosed by Haglund for the purpose of providing a portability of transmitting a wireless signal from the transmitter to a remoter receiver in order to facilitate the directional indication to the first vehicle operator how to control his vehicle in responding to an indication of the directional indicator to compensate the request from the second vehicle.

Regarding claim 20, Haglund fails to disclose the step of supplying the wireless receiver with an audible indicator and sounding the audible indicator so as to alert the first driver that a directional indicator is activated and appropriate action is necessary. Lentine et al. teach the receiver having an audible indicator (54) in addition with the visual display (22) for sounding an audible signal in response to a signal transmitted from the transmitter (col. 4, line 6 through col. 6, line 24). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the wireless transmitter and receiver as taught by Lentine et al. in the system as disclosed by Haglund for the purpose of providing a portability of transmitting a wireless

signal from the wireless transmitter to a remoter receiver to facilitate the directional indication to a remote operator and visually/audibly indication the desired conditions to enable the operator taken action in response thereto.

3. Claims 3-4, 9-10, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haglund in view of Lentine et al. as applied to claim 1 above, and further in view of Toal, Jr. (US 4,797,671).

Regarding claim 3, Haglund, as modified, discloses the instant claimed invention except for: the transmitter having a dip switch for coding a signal and the receiver containing a dip switch for decoding received signal. Toal, Jr. teaches a transmitter (12) having a DIP switch for encoding a signal and a receiver (20) containing a DIP switch for decoding the signal (figure 1; col. 4, lines 8-34). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the DIP switch in the transmitter and the DIP switch in the receiver as taught by Toal, Jr. in the system as disclosed by Haglund, as modified, for the purpose of providing an operator of selecting a radio frequency transmission signal by matching the codes in the signal in order to prevent an inadvertency activation indicator.

Regarding claim 4, Haglund fails to disclose the transmitter and receiver having an effective range of 1000 feet or less. Franklin teaches the wireless transmitter (36) located in a tow bar handle (16) and communicating with the wireless receiver (24) located in a boat (10, figures 1-2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to know that the

transmitter and the receiver are communicated in an effective range within 1000 feet in order to ensure that the transmitted signal is perfectly received by the receiver.

Regarding claim 9, Haglund, as modified, discloses the instant claimed invention except for: the transmitter having a dip switch for coding a signal and the receiver containing a dip switch for decoding received signal. Toal, Jr. teaches a transmitter (12) having a DIP switch for encoding a signal and a receiver (20) containing a DIP switch for decoding the signal (figure 1; col. 4, lines 8-34). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the DIP switch in the transmitter and the DIP switch in the receiver as taught by Toal, Jr. in the system as disclosed by Haglund, as modified, for the purpose of providing an operator of selecting a radio frequency transmission signal by matching the codes in the signal in order to prevent an inadvertency activation indicator.

Regarding claim 10, Haglund fails to disclose the transmitter and receiver having an effective range of 1000 feet or less. Franklin teaches the wireless transmitter (36) located in a tow bar handle (16) and communicating with the wireless receiver (24) located in a boat (10, figures 1-2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to know that the transmitter and the receiver are communicated in an effective range within 1000 feet in order to ensure that the transmitted signal is perfectly received by the receiver.

Regarding claim 15, Haglund, as modified, discloses the instant claimed invention except for: the transmitter having a dip switch for coding a signal and the receiver containing a dip switch for decoding received signal. Toal, Jr. teaches a

Art Unit: 2632

transmitter (12) having a DIP switch for encoding a signal and a receiver (20) containing a DIP switch for decoding the signal (figure 1; col. 4, lines 8-34). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the DIP switch in the transmitter and the DIP switch in the receiver as taught by Toal, Jr. in the system as disclosed by Haglund, as modified, for the purpose of providing an operator of selecting a radio frequency transmission signal by matching the codes in the signal in order to prevent an inadvertency activation indicator.

Regarding claim 16, Haglund fails to disclose the transmitter and receiver having an effective range of 1000 feet or less. Franklin teaches the wireless transmitter (36) located in a tow bar handle (16) and communicating with the wireless receiver (24) located in a boat (10, figures 1-2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to know that the transmitter and the receiver are communicated in an effective range within 1000 feet in order to ensure that the transmitted signal is perfectly received by the receiver.

4. Claims 5-6, 11-12, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haglund in view of Lentine et al. and Toal, Jr. (US 4,797,671) as applied to claim 3 above, and further in view of and Franklin (US 4,689,611).

Regarding claim 5, Haglund, as modified, discloses the instant claimed invention except for: the transmitter power supply and receiver power supply being a battery contained in transmitter and receiver units. Franklin teaches the transmitter (36) having its own power supply (44, figure 8) and the receiver (24) has its own power

Art Unit: 2632

supply (28) contained therein (figure 7). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the transmitter, the receiver and their own power supplies as taught by Franklin in the system as disclosed by Haglund, as modified, for the purpose of providing operating power to the transmitter and receiver.

Regarding claim 6, as shown in figures 1 and 4-5, Haglund disclose the transmitter power supply and the receiver power supply is a cigarette lighter plug (34) for attachment to the vehicle.

Regarding claim 11, Haglund, as modified, discloses the instant claimed invention except for: the transmitter power supply and receiver power supply being a battery contained in transmitter and receiver units. Franklin teaches the transmitter (36) having its own power supply (44, figure 8) and the receiver (24) has its own power supply (28) contained therein (figure 7). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the transmitter, the receiver and their own power supplies as taught by Franklin in the system as disclosed by Haglund, as modified, for the purpose of providing operating power to the transmitter and receiver.

Regarding claim 12, as shown in figures 1 and 4-5, Haglund disclose the transmitter power supply and the receiver power supply is a cigarette lighter plug (34) for attachment to the vehicle.

Regarding claim 17, Haglund, as modified, discloses the instant claimed invention except for: the transmitter power supply and receiver power supply being a

Art Unit: 2632

battery contained in transmitter and receiver units. Franklin teaches the transmitter (36) having its own power supply (44, figure 8) and the receiver (24) has its own power supply (28) contained therein (figure 7). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the transmitter, the receiver and their own power supplies as taught by Franklin in the system as disclosed by Haglund, as modified, for the purpose of providing operating power to the transmitter and receiver.

Regarding claim 18, as shown in figures 1 and 4-5, Haglund disclose the transmitter power supply and the receiver power supply is a cigarette lighter plug (34) for attachment to the vehicle.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alley, Sr. (US 4,483,683) discloses a ski tow signal assembly including a radio receiver located in a boat for actuating a horn and light in response to receive an appropriate signal transmitted from a transmitter.

Chandler (US 3,944,972) discloses a communication device for assisting the driver of a vehicle including an indicator box having a least three indicating devices for indicating turn signals in response to a signal generating from a control box.

Art Unit: 2632

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai T. Nguyen whose telephone number is (703) 308-0160. The examiner can normally be reached on Monday-Friday from 7:30am-5:00pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



March 26, 2004
Tai T. Nguyen
Examiner
Art Unit 2632